

W1TKZ

The Spark Gap

November 1988

Official Journal
of the
Wellesley Amateur Radio Society

President's Message

by Tom Kinahan, N1CPE

By popular request, I shall devote this space to describing our club station, W1TKZ.

The station is located in the Wellesley Chapter House of the Red Cross, and may be used at any time by any WARS member; just get a key from any of the officers. Present equipment includes a TS-820S HF transceiver, on loan from station trustee Dave Curry, K1TK. This rig has tube finals and covers 160 through 10 meters with SSB and CW. It runs into a Cushcraft five-band vertical antenna on the roof of the garage. Rain storms tend to mess up the VSWR, so there is an antenna matcher near the station, if needed. There is also a Heathkit amplifier that can be put on line, but don't use it until you know what you're doing.

We also have a 2-meter all-mode rig, also on loan from Dave Curry, but with no outside antenna. There is a ground-plane antenna which usually resides on the floor under the operating table. Between the aforementioned rigs is a 6-meter all-mode rig with a

dipole tacked to the moulding around the room.

As you can see, we have a functional station, but hardly a big-gun station. Part of the reason that there are not better VHF antennas is that the Red Cross isn't eager to have them on the building.

The club owns, or possesses, extensive HF, VHF, and microwave antenna systems, with more than a hundred feet of tower and a rather large military generator on a trailer. Much of this equipment is used during the various operating events, such as Field Day and VHF contests. It could be used for other club activities as well: if you have any suggestions, they will be welcome.

Our club repeater, which we own, is located at the Newton-Wellesley Hospital. Its frequencies are 147.63 MHz input and 147.03 MHz output, as many of you know. It includes the repeater itself, with 18 watts out, an amplifier with 100 watts out, and the duplexers, which allow the repeater to use the same antenna for transmitting and receiving. The loss through the duplexers is about 1.5 dB, so the power into the 100 feet of feedline is about 75 watts. The Hospital helps us out with location, emergency power, and a telephone line for control of the repeater and for emergency autopatches. The 440-MHz system is not yet on line, but is expected to be on 449.6 MHz input and

Meetings This Year

Thursday November 3 at 7:30 PM
Thursday November 17 at 7:30 PM
Thursday December 1 at 7:30 PM
Thursday December 15 at 7:30 PM

211 Washington Street, Wellesley

444.6 MHz output. It will be linked with the 2-meter machine to allow cross-band operations. It is not up yet, so I can't report on its specific hardware.

That is a complete description of W1TKZ at this writing. I should mention that the FCC no longer issues club licenses, and no licenses at all with the prestigious W1 prefix; so we should be proud of our station, and keep it active — if we lose it, we cannot get it back.

73, and see you next month.

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### Officers

**President:**

Tom Kinahan, N1CPE 508/ 877-3456

**Treasurer:**

C. J. McDonald, WB1BUM  
617/ 332-6091

**Vice President:**

Rita Baker, N1DDI 508/ 481-0863

**Recording Secretary:**

Roger Smith, W1EOA 617/ 235-6239

**Corresponding Secretary:**

Kathy Pate, KA1IYR 508/ 785-1801

**Fund Raising Chairman:**

David Kent, N2AWG 508/ 875-2126

**Operations Chairman:**

Vern Valero, ND1Z 508/ 533-6822

### November Speaker

At our meeting on November 17, Mike Adlerstein (K1FB) will speak to us on the subject of solid state devices. The meeting will be at the Wellesley Red Cross at 7:30 PM.

### CONTEST!

Several members would like to operate W1TKZ in a serious effort for the ARRL November Sweepstakes. The CW contest is November 5 and 6, and the phone contest November 19 and 20. Each contest begins at 4:00 PM on Saturday and ends at 10:00 PM on Sunday.

The objective of the Sweepstakes is to work as many stations as possible and as many ARRL sections as possible. Each QSO must include the exchange of a QSO serial number, a power code, call sign, the last two digits of the year of license, and the ARRL section. For example, we would answer W1AW's call by sending "W1AW NR135 A W1TKZ 53 EMA", indicating QSO number 135, power class A (less than 150 watts), licensed in 1953, Eastern Massachusetts section.

We are allowed to operate only 24 of the 30 hours in the contest, but that still means manning the station round the clock. This will be a good chance for those wanting to get into contesting, because we have not been active in HF contests for some years, and we do not yet have a stable of experienced "regulars".

If you would like to take a shot at it, call Tom, N1CPE, at the number on this page and sign up for a shift.

**The Spark Gap**  
**Official Journal of the Wellesley**  
**Amateur Radio Society**

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Wellesley, Massachusetts 02181  
617/ 449-0556

**The Spark Gap** is published monthly, except July, by the Wellesley Amateur Radio Society. The Society hereby grants permission for reprinting any articles from **The Spark Gap**, provided only that the author and this newspaper are credited.

The Society's purpose is to encourage participation in amateur radio. Membership is open to all radio amateurs; dues are \$15 per year (September through August). Meetings of the Society are held on the first and third Thursdays of each month. The Society conducts classes for those intending to take FCC license examinations, and examination sessions four times a year. For more information please write to the editor, or to the Society:

**The Wellesley Amateur Radio Society**  
**211 Washington Street**  
**Wellesley, Massachusetts 02181**

## **New Rig for W1TKZ**

by Tom Kinahan, N1CPE

In my monthly message, above, I told you about W1TKZ as it is. Now I would like to talk about it as it might be.

At the October business meeting, we discussed the future of the HF portion of the station. At present, the club does not own

an HF rig — the TS-820S is only on loan. There was general agreement that we should consider acquiring a transceiver, and we drew up a list of requirements, as follows:

- It should be capable of operating packet and RTTY;
- It should cover the 30-, 17-, and 12-meter bands as well as the traditional five HF bands;
- It should operate on 12 volts DC
- It should have facility for at least adding appropriate filters for RTTY, CW, etc.
- General-coverage RX would be desirable;
- 100 watts TX output is sufficient.

Since there is no money in our budget for such a transceiver, we decided to resort to a scheme used successfully in the past, when we bought a new repeater.

A special HF Transceiver Fund has been set up, separate from regular club funds. Members are hereby being asked to make *purely voluntary* contributions to the Fund — \$20 will be sufficient if enough members chip in — strictly for the purpose of buying an HF rig. Donors will be glorified in **The Spark Gap**. If you can manage a contribution, please send it to the HF Transceiver Fund at the club address, at left.

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Volunteers for Medical Engineering, Inc.

The existence of this interesting organization was brought to our attention by Kathy, KA1IYR. VME is a nonprofit (tax-exempt) corporation which assembles volunteer engineers to design equipment to help handicapped persons.

Larry Cahill, the head of the Boston Chapter, has expressed interest in working with hams — those who are handicapped as well as those who have technical skills — on the problem of modifying equipment to make it easier for the handicapped to enjoy amateur radio. Those who have handicaps are being sought by VME to help them identify the problems of handi-hams, and volunteer engineers (handicapped or otherwise) are needed to work on solutions.

VME has worked on such projects as bionic hands, page-turners, eye-command devices, and voice synthesis. For more information, contact:

Lawrence Cahill
16 Woburn Street
Medford, Massachusetts 02155
617/ 577-4286

Dues!

WARS membership dues (\$15 for most) are due. If you have not yet paid, please send your check with the membership form on page 9.

The Repeater Expedition: A Bystander's Report

by Sue Sample, N1FWJ

Is there a doctor in the house? Quick! Help! Our repeater is ill! On Tuesday, October 25, Tom Kinahan (N1CPE), Steve Meserve

(N1FZA), Frank Caci (N1FWI), and this reporter began our trek to the Newton-Wellesley Hospital to reinstall the WARS repeater, which had been inoperative since Saturday.

As the full moon and crisp Autumn air guided us to our destination, I had no idea how I was going to be of help. Not a technical person by nature, I didn't even know what the repeater looked like. (I discovered that the days of large, bulky equipment are over: the repeater is no bigger than a tool box!)

When we arrived, we took the elevator and climbed the narrow, circular stairs to the roof, to take care of our "patient". My trusty flashlight (I knew I would find some way to help) led us to the caged closet where the repeater would be reconnected.

Within a few minutes, Doctor Tom had our "patient" back to work. After Tom, Frank, and Steve performed several voice tests, and checked the telephone line, I had a chance to communicate from the repeater station — and Joel was there: "KA1QIY, this is W1TKZ repeater." How about that?

Going home, I smiled to myself; I'm learning new things (even technical things), making new friends, and beginning to love ham radio.

Housecleaning

The Wellesley Red Cross needs our help in cleaning up the building at 211 Washington Street, and the garage behind. We are to assemble at 9:00 AM on Sunday, November 20, and work until 5:00, if necessary.

Please try to lend a hand, even if only for part of the day. There is no glory in this, but it is the least we can do for our benevolent landlord. (You can't beat our rent!)

Message Fair

by Tom Kinahan, N1CPE

On September 24th, we operated a message fair from the Boston National Historical Park, near the USS Constitution. We were provided a 20-foot-square canvas pavilion to protect us from heat or rain, but in the event we didn't need it, as we enjoyed beautiful weather.

Our Message Center was just one of the many attractions of Harbor Park Day, which also featured the annual clam-chowder contest, tours of Old Ironsides, Cassin Young, and a visiting AEGIS-class Navy cruiser.

Our standard message was ARL FIFTY-ONE HARBOR PARK DAY, which, rendered into English becomes:

"Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators here at Harbor Park Day. Am having a wonderful time."

Dave Bush, KA1RWK, Don Koch, NT1L, and Ged Weare, NF1Z, all brought their packet stations down, and each message was passed to the N1BGG packet bulletin-board system in Charlestown, whence they were relayed to stations all over the US for delivery. The major advantage of using packet radio for a message fair is that it does not bog down any small group of stations with lots of messages: the packet system relays messages automatically, without human intervention.

A great time was had by all, and a new tradition seems to have been born: dinner after the event. Many of us got together at Pizzeria Uno in Framingham to refresh ourselves after a long day. Lots of good work was done by the following,

in support of the three packet stations: Elaine Chase (KA1SAO), Art Anderson (NT1M), Bob Salow (WA1IDA), Denis Guillemette (KA1SAR), and your obedient servant, N1CPE.

ARRL Membership

If you want to renew your membership in the American Radio Relay League (or join for the first time) please do so through the Society, as we get a commission: \$5 for each new member and \$2 for each renewal.

Just send your renewal form to:

C.J. McDonald, WB1BUM
48 Hale Street
Newton, Ma 02164

If you are not a member of the ARRL, note that membership includes a subscription to *QST*, access to the outgoing QSL bureau, and other goodies — to say nothing of supporting the cause of amateur radio in general. Our club has a long tradition of supporting the League.

Governor's Cup Run

by Tom Kinahan, N1CPE

The Governor's Cup Run was held on October 2nd, in and around Boston Common. We helped provide additional safety communications for the participants, all of whom were more than forty years old. Because of the age of the participants, we expected to have problems but, fortunately, there were none at all. [Not everyone over forty is decrepit, Tom! —ed.]

We had the help of the owners and trustees of the Boston Red Cross repeater (145.23 MHz) for the duration of the race, and they deserve our thanks.

Our job was to look out for people who needed help in any of the three events, which were: a one-mile walk, a three-mile walk, and a five-mile run.

On the Fenway where Dave Bush (KA1RWK) was stationed, the people who were supposed to pour water for the runners never showed up, so Dave was drafted. He, in turn recruited some passers-by to help pour, and together they got water to all the runners. "Dave was the hero of the day," said Mary Mahoney, race director, "He bailed us out of a tough position."

In addition to Dave, the following persons participated: Roger Tobin (N1EYZ), Vern (ND1Z) and Liz (N1FUP) Valero, Don Koch (NT1L), Tim Cadigan (N1FME), Frank Caci (N1FWI), Sue Sample (N1FWJ), Ian MacLennan (AF1R), and the writer (N1CPE). After the race, we adjourned to the Ground Round, in Framingham, for a burger.

Wednesday Night Net

Don't forget our weekly net on the club repeater (147.03 MHz) at 8:00 PM local time. The purpose of the net is to exchange club news and items of general interest to hams. All are welcome to check in.

Wellesley Veterans Parade

by Tom Kinahan, N1CPE

The Wellesley Veterans Parade was held on October 16th, much to the delight of many thousands of onlookers. Wellesley ARS members assisted parade officials in lining up parade units along Washington Street, and down Woodlawn, Elm, and Croton Streets.

We had operators stationed in each of these streets, with the parade starters, at the information booth, at the midpoint of the parade, and at the reviewing stand — so we really had this parade covered!

Don Koch (NT1L), Dave Bush (KA1RWK), Vern Valero (ND1Z), Elaine Chase (KA1SAO), Frank Caci (N1FWI), Tom Kinahan (N1CPE), Steve Meserve (N1FZA), and Art Thompson (KA1ENP) did the honors at this one. Good job folks!

After watching the parade (some for the second time), we retired to the Ground Round for debriefing.

Christmas Party



The club Christmas Party will be held on Saturday, December 10, at 7:00 PM, at a place to be announced.

We will repeat the pot-luck format of last year. This is your opportunity to cook your favorite dish and receive compliment after compliment. Think of how delicious all that home-cooked food will be!

Please call Liz, N1FUP, at 508/ 533-6822 to tell her what food you will bring — or leave a message on the N1DKF packet bulletin board.

17-Meter Band

It now appears that the 17-meter band (18.060-18.168 MHz) will be open to U. S. amateurs on July 1, 1989. The FCC has just proposed rules for the use of the band, which, if they become final, will open the band to General, Advanced, and Extra Class licensees on that date.

There is to be a CW/digital subband on the

bottom of the band (18.060-18.110 MHz) and a phone (including CW, television, and fax) subband on the remainder (18.110-18.168 MHz).

The 17-meter band was first allocated to the Amateur and Amateur-Satellite Services by the World Administrative Radio Conference (WARC) of 1979 — which also gave us the 30-meter (10.100-10.150 MHz) and 12-meter (24.890-24.990 MHz) bands. The 17-meter band has been forbidden to U. S. hams, however, because it was being used by certain government fixed operations. These will now be ordered to cease as of July first.

Editor's Note

The Editor would like to see a regular DX column in **The Spark Gap**, but, as a new ham, he is hardly qualified to write it. With so much DX activity now on 20, 15 and 10 meters, everyone must have some interesting triumphs to report. For example, your Editor has recently worked C30LFC (Andorra), UI8IF (Uzbekistan), OY2J (Faeroe Islands), OH4ML/OH0 (Åland Islands), VQ9QM (Diego Garcia), 4S7WP (Sri Lanka), 9Q5DX (Zaire), 3B8CF (Mauritius), and RA9YD (Barnaul, Altai Oblast, with a direct airmail QSL!). What have you been up to?

Any suggestions for the new column would be welcome; a volunteer to coordinate the column would be even more welcome. What about it, you big guns (or little guns who want to get big)?

Russian Space Station

The new Russian *Mir* space station will begin two-way communication with Earth on November 19, via two-meter FM, under the call U1MIR. The downlink frequency will be 145.550 MHz and uplinks will be at

145.525 MHz and 145.575 MHz. Initial transmitter output will be 2 watts.

Because of the orbit of the station, you will be able to work it only during short "windows" of about ten minutes each. Mort Cohan (KA1IU) will be computing the orbits, and will announce the times of the windows on our Wednesday-night net.

U1MIR will operate only on weekends, but operations are expected to continue for many months.

Let's Upgrade

by Vern Valero, ND1Z

Some people find the code exam to be a difficult barrier. If that is the case for you, cheer up! Passing that code exam may be difficult, but it is not impossible.

We live in a world of the printed word. Nothing is official until it is seen "in black and white". Most folks remember taking exams in school. The exams required consulting memory or exercising analytic skills to produce printed results on the exam answer sheet.

The code exam is somewhat different. It is primarily an aural experience. We hear the code, consult our memory for character recognition, and provide a "translation" of the meaning for the examiners. Answering questions about the QSO is secondary to the aural experience of copying the code.

If one can leave behind the "printed-word" bias of our culture, studying for and taking the Morse-code exam can be an interesting experience. Yes, it is a lot of work — anything worthwhile usually is — but it is also rewarding.

There seems to be no sure-fire short-cut to increasing code speed. Regular and steady practice is required. There are many aids to practice: W1AW broadcasts, memory practice keyers, personal computers, and on-the-air experience. Find the method or combination of methods that work best for you. It does appear that having actual, on-the-air CW QSO's is superior to some other methods — if you are willing to copy close to, or slightly faster than, your fastest speed. Also, the experience of chatting with real people whom you don't know steadies your nerves for the exam session.

The most important element of code practice is remaining ever faithful to it! Select an exam date so that there is a concrete goal to work for. Then select one or two times daily when you can devote fifteen or twenty minutes to practice, *and stick with it*. If code practice becomes a habit, your speed will increase. That is a guarantee!

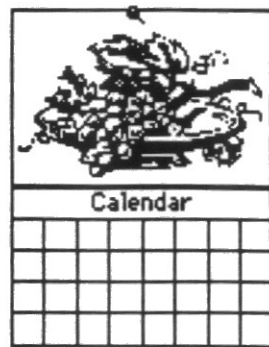
It does take a certain mindset to pass a code exam. consider yourself to be a "copying machine". Simply copy each character as you hear it. Missed a character? Big deal! "Copy machines" don't worry about missing characters — why should you? Just leave a space. More than likely you will be able to fill in the blank after the code transmission.

When exam day comes, be relaxed and confident. Use the "copy-machine" attitude when the code tape is played. Afterwards, look at your copy and try to pick out the information requested on the exam sheet. Be willing to take risks, if necessary. For example, if the question is, "What is his occupation?" and your copy sheet shows "...FOR UNITED", be willing to risk the answer that he is a pilot for United Airlines. A good guess can make the difference between passing and failing.

After you pass the code exam (and we know

that you will!), don't throw those CW skills away by operating voice only. There are many nice folks to chat with on CW, and interesting DX to work. Operate CW and have some fun.

Calendar



Nov. 17	WARS meeting (speaker: Mike Adler - stein, K1FB)
Nov. 19-20	ARRL Sweepstakes (SSB) at W1TKZ
Nov. 20	Housecleaning Party at Wellesley Red Cross
Nov. 26-27	CQWWDX Contest (CW)
Dec. 1	WARS meeting
Dec. 3	WARS Exam Session
Dec. 10	WARS Christmas Party (N1FUP)
Dec. 15	WARS meeting
Jan. 7-8	First annual ARRL RTTY Roundup

We would like to publish as complete a calendar as possible each month, so please let us know if you have a date that should appear here. -Ed.

For Sale

Kenwood TS-930 AT with both 500- and 250-Hz CW filters. Call Jerry, KA1000, at 617/ 444-2686.

The Wellesley Amateur Radio Society

Membership Application

If you are a licensed amateur radio operator, and like what you see of our Society, why not join us? Just fill in the blanks below and send this page with your dues*, to:

**The Wellesley Amateur Radio Society
211 Washington Street
Wellesley, Massachusetts 02181**

Name: _____ Call: _____ Class: _____

Address: _____

Telephone: _____ ARRL Member? yes ☐ no ☐

Tell us about your interests (check any or all):

- | | |
|---------------------------------------|---|
| ☐ Contesting | ☐ Emergency Preparedness |
| ☐ Homebrewing | ☐ Packet |
| ☐ Portable/QRP | ☐ Public Service |
| ☐ FM Repeater | ☐ RTTY |
| ☐ Satellite | ☐ Traffic Handling |
| ☐ VHF/UHF | ☐ Other: _____ |

Remarks: _____

* **Individual** dues are \$15.00 annually, or \$2.00 annually for blind persons who do not wish to receive **The Spark Gap**. **Family** dues are \$15.00 annually plus \$2.00 for each additional licensee (just one **Spark Gap** subscription per family membership).

November 1988

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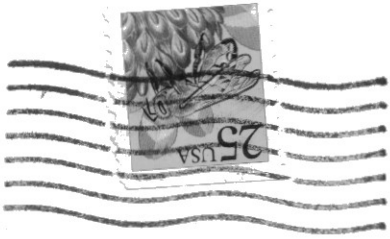
WILLIAM HANLON NIADY
49 VINE STREET
WRENTHAM, MA 02093

211 Washington Street
Wellesley, Massachusetts 02181

The Wellesley Amateur
Radio Society

First Class Mail

The Spark Gap



Wellesley Red Cross Building
10:00 AM
Call Vern, ND1Z 508-533-6822

Saturday,
December 3, 1988

Next WARS
Exam Session

Happy Thanksgiving

